

Site Name Swift Creek upstream of 285

Date: 3/6/2019

Field ID/WIN ID G3NW0149

Project: SMP

Visit ID 79248

RQ: 2019-02-18-20

RPS ID 9257

LIMS ID: 206957

VPDB ID 11224

HA ID 15670

☒ ~~LVI~~ SCI

☐ RPS/LVS Only

☒ Sample Site Created in SBIO

☒ Phys/Chem entered in SBIO FB 3/11/2019

☒ HA entered in SBIO Initial FB 3/11/19

☐ Date and Initial QA: _____

☒ RPS entered in SBIO Initial FB 3/11/19

☐ Date and Initial QA: _____

☒ ~~LVI~~ entered in SBIO Initial FB 3/11/19

☐ Date and Initial QA: _____

LVS

☒ ~~2~~ m² vegetation

☒ Plants getting verified

Date submitted: In House

☐ Plants verified

Date returned: In House

☐ RPS authorized in SBIO

☐ Date and Initial: _____

☐ RPS score: _____

☐ VPDB authorized in SBIO

☐ Date and Initial: _____

☐ VPDB score: _____

☐ SCI complete: _____

SCI Score: _____

☐ If SMP, scanned into database



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
STRATEGIC MONITORING PROGRAM FIELD SHEET

January 2019

Data Qualified?

Yes ☒ No ☐

WIN Station Name:

Swift Creek upstream of 285 (Partin Dr)

Date: 03/06/2019
(mm/dd/yyyy)

WIN/ Field ID: G3NW0149

WBID: 568

Latitude: 30.52830

County: Okaloosa

ORG ID: 21FLPNS

Longitude: -86.46706

(Decimal Degrees)

Receiving Body of Water: Rocky Bayou

RQ-2019- 62-18-20
(Decimal Degrees)

Sampling Team Members					WQ Measurements	Sample Collection	Documentation	Preservation	Preservation Check	Sampling Equipment				
Mike King Nathan Nathan Murray										☐ Sample Container	☐ Van Dorn	☐ Pole		
										☐ Carboy	☐ Syringe			
										☐ Dipper	☐ Other			
										Depth Measured with _____				
										Equipment ID _____				
										Collection Method				
										☐ Wading	☐ Canoe/Kayak			
										☐ From Shore	☐ Electric Motor			
										☐ Other	☐ Gasoline Motor			
Water Level: Dry/ Pooled/ Low / Normal / High / Flooded					Meter ID# 154179			Matrix: Fresh Marine / DI						
Photos: Yes No					Flow: No Flow / Intestinal / Flowing / NA			Tide: Rising/ Falling/ Slack/ NA			Tide Times: High Low			
Time Zone	Time	Total Depth (m)	Sample Depth (m)	Secchi Disk (m)	DO (mg/L)	DO (%SAT)	pH	Salinity (PPT)	Sp COND (umhos/cm)	Temp. (C°)				
EST	1200	1.12	0.3	VOB	10.23	101.2	5.53	8.01	26.0	14.9				
CEN														
Biological Samples Collected: None HA SCI RPS Algae ID LVS LVI Other:														
SBIO ID Numbers: SBIO-ID: 79248 HA-ID: 15670 RPS-ID: 9257 Macrophyte-ID: 11220 LIMS#: 246957														
Parameter Suite		Parameter Methods				Preservation		Lot#	Expiration	pH Check				
Preserved Nutrients		☒ W-NH3 / W-NO2NO3 / W-TKN / W-TOC / W-S-A-TP				☐ Ice ☐ H2SO4		SA 8197090	07/16/19	☒ 2				
Metals		☐ W-ICPMS ☐ W-ICP				☐ Ice ☐ HNO3		NA 8344050	12/10/19	☒ 2				
Filtered Nutrients		☐ W-PO4-F ☐ Field Filtered 0.45 um Filter				☒ Ice								
Chlorophyll		☒ CHLSUITE-W				☒ Ice								
Physical/Aggregate (Fresh)		☐ Alkalinity / W-F / W-TSS / TURBIDITY / W-Cl-IC / W-COLOR / W-SO4-IC / W-TDS				☒ Ice								
Physical/Aggregate (Marine)		☐ Alkalinity / W-BR-IC / W-F / W-TSS / TURBIDITY				☐ Ice								
Macroinvertebrates		☐ M-FW-QLDC				☐ Formalin								
Periphyton		☒ ALGAE-ID				☐ Ice								
Microbiology		☐ E. coli ☐ F. coli ☐ Enterococci				☒ Ice								
Molecular		☐ PCR-FILTER ☐ PCR-BacR ☐ PCR-GULL2 ☐ PCR-HF183 ☐ PCR-DG3 ☐ PCR-GFD				☐ Ice								
Tracers		☐ W-E8321-DI ☐ W-E8321-MS				☒ Ice								
Pesticides		☐ W-PSNP-TQ				☒ Ice								
Phytoplankton		☐ DTY-ON-C ☐ PKD-ON-C												
Notes:														
Ref: Date: 24Sep18 S Dep: Wgt: 10.00 LBS St DV: 0.00 HAN TOTA														
Svog: PRIORITY OVERNIGHT Master: 4386 5033 9413 TRACK: 4386 5033 9424														
Signature: _____										Date: 3/6/19				
Field/WIN ID → G3NW0149														
Location: Swift Creek upstream of 285 (Partin Dr)														

LIMS EVENT ID: _____ WIN Import ID: _____

Enter Field Parameters, Verify Station ID In LIMS DMT: _____ QC Station ID, Field Parameters In LIMS DMT: _____

Scan/Save Field Sheets _____ Migrate Data to WIN: _____ Verify Data In WIN: _____

(Initials/Date)

(Initials/Date)

(Initials/Date)

(Initials/Date)

DEP Form FD 9000-3 Physical/Chemical Characterization Field Sheet

SAMPLE ID 79248 ORG ID 2IFLPS LATITUDE 30.52858
COUNTY OKALOOSA STORET # G3NW0149 LONGITUDE 86.46729
DATE 03/06/2019 TIME 1200 SAMPLING AGENCY FDEP NW ROC
SITE NAME SWIFT CREEK WBID 568
FIELD ID/NAME G3NW0149 RECEIVING BODY OF WATER Rocky Bayou

RIPARIAN ZONE / STREAM FEATURES

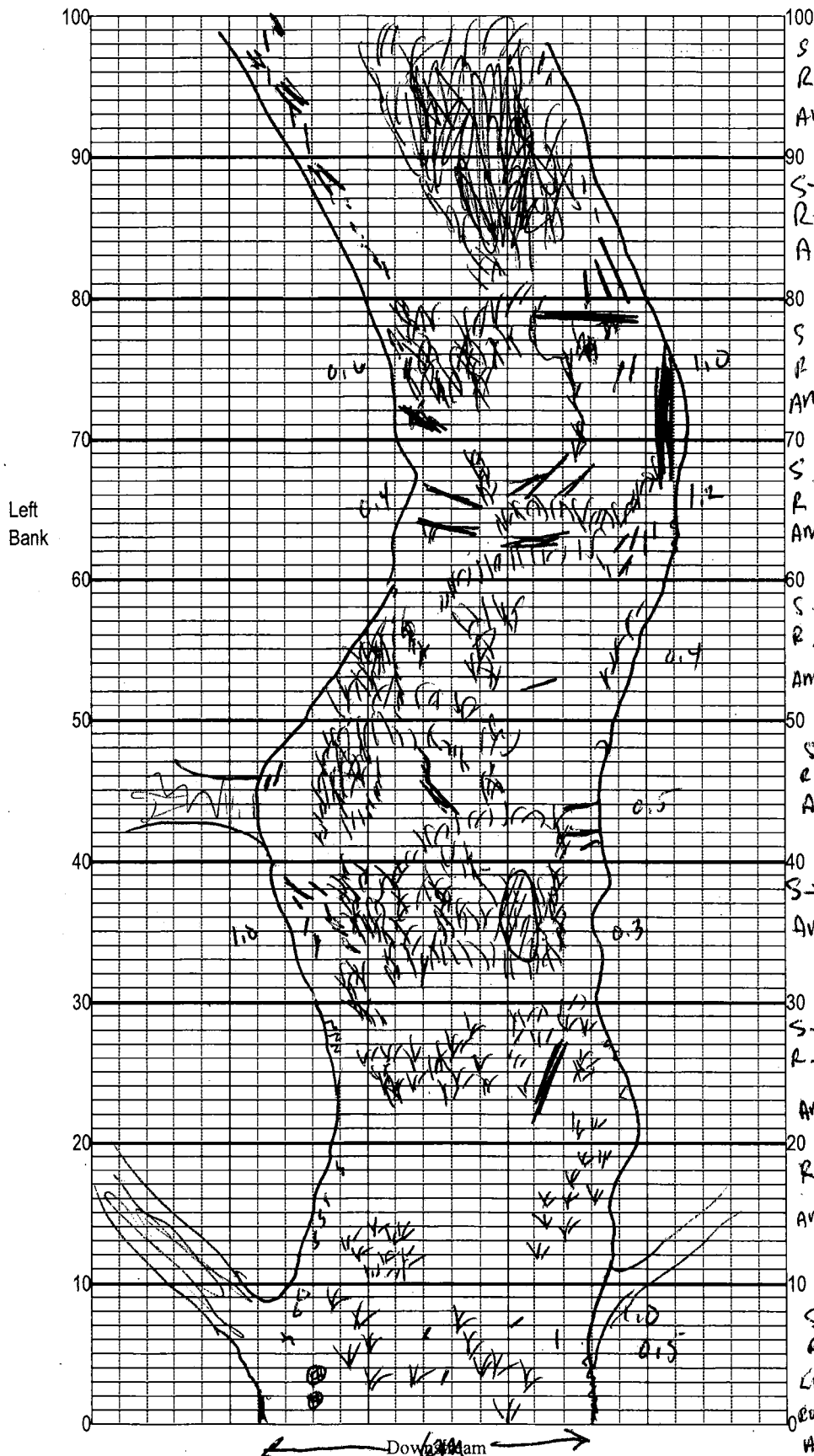
R2-2019-02-18-24

PREDOMINANT LAND-USE IN WATERSHED (specify relative percent in each category): Forest/Natural ☐ Silviculture ☐ Field/Pasture ☐ Agricultural ☐ Residential ☐ Commercial ☐ Industry ☐ Other (Specify) ☐							Landscape Development Intensity Index (LDI) <u>N/A</u>
Local Watershed Erosion (select one): ☐ None ☐ Slight ☒ Moderate ☐ Heavy							Typical Width (m) Depth (m)/Velocity (m/sec) Transect <u>6.0</u> m wide
Local Watershed NPS Pollution: ☐ No evidence ☐ Slight ☒ Moderate ☐ Heavy							
Width of Riparian Vegetation (m) on Each Buffer Side Left Bank: <u>House 100 ft</u> Right Bank: <u>>18</u>				Hydrologic Modification Score (per FT 3101) <u>5-6</u>		0.59 m/s 0.23 m/s 0.33 m/s 0.4 m deep 0.7 m deep 0.6 m deep	
High Water Mark: <u>0.5</u> + <u>0.7</u> = <u>1.2</u> (m) (above present water level) (present depth) (above bed)				Artificially Impounded ☐ Yes ☒ No			
Artificially ☒ No ☐ Mostly recovered, more sinuous				Canopy Cover % ☐ Open ☒ Lightly Shaded (11-45%) ☐ Channelized: ☐ Some recovery ☐ Recent, severe ☐ Heavily Shaded ☐ Moderate Shaded (46-80%)			

SEDIMENT / SUBSTRATE

Sediment Oils ☒ Absent ☐ Slight ☐ Moderate ☐ Profuse			Sediment Odors ☐ Normal ☐ Sewage ☐ Petroleum ☐ Chemical ☒ Anaerobic ☐ Other (Specify):			Smothering of Substrates Sand Smothering: None ☐ Slight ☐ Moderate ☐ Severe ☒ Silt Smothering: None ☐ Slight ☐ Moderate ☒ Severe ☐ Algae Smothering: None ☐ Slight ☒ Moderate ☐ Severe ☐		
SUBSTRATE TYPE Assessment Tool: ☒ SCI ☒ RPS ☒ LVS ☐ LCI ☐ BioRecon % Coverage INVERT # Times Sampled PERI # Times Sampled Woody Debris (Snags) <u>8</u> <u>5</u> Undercut Banks / Roots <u>2</u> <u>5</u> Leaf Packs or Mat <u>2</u> Aquatic Vegetation <u>50</u> <u>5</u> Rock or Shell Rubble.. <u>41</u> <u>1</u> Sand..... <u>40</u> <u>2</u> Mud / Muck / Silt Other Other			WATER QUALITY Depth (M) Temp. (°C) pH (SU) D.O. (MG/L) D.O. Sat (%) Cond. (UMHO/CM) Salinity (PPT) SECCHI (M) Top: <u>0.3</u> <u>14.9</u> <u>5.53</u> <u>10.23</u> <u>101.2</u> <u>26.0</u> <u>9.01</u> <u>1.2</u> Mid: Bottom: <u>1.2</u> Meter ID: <u>154179</u> Water Odors Normal ☒ Petroleum ☐ Sewage ☐ Chemical ☐ Other ☐ Water Sample Taken? ☒ Yes ☐ No Sample Preserved? ☒ Yes ☐ No Lot Number: <u>SA 819 7090</u> Exp: <u>7/16/19</u> Algae Sample Taken? ☐ Yes ☒ No Sample Preserved? ☐ Yes ☐ No Lot Number: Exp: Water Surface Oils Normal ☒ Sheen ☐ Globs ☐ Slick ☐ Other ☐ Color <u>Faint</u> ☒ Green (Algae) ☐ Clear ☒ Other (Specify) ☐ Clarity <u>Clear</u> ☒ Slightly Turbid ☒ Turbid ☐ Opaque ☐					
ABUNDANCE Not Obs. Rare Common Abundant Periphyton: ☐ ☐ ☒ ☐ Fish: ☐ ☐ ☒ ☐ Aquatic Plants: ☐ ☐ ☐ ☒ Iron/Sulfur Bacteria: ☐ ☒ ☐ ☐			System Type: Stream ☒ Lake ☐ Wetland ☐ Estuary ☐ Other(Specify) ☐ AMBIENT FIELD CONDITIONS / NOTES <u>LIMS ID 246957</u> ☒ The antecedent hydrologic conditions have been met to my best knowledge.					
SAMPLING TEAM <u>Mike King, Nathan Mulkey</u>			SIGNATURE <u>[Signature]</u>			DATE <u>03/06/2019</u>		

DEP Form FD 9000-4 Stream/River Habitat Assessment Sketch Sheet



Length of grid represents 100 m of stream (not linear meters).
(Horizontal scale is double vertical scale, draw proportionately).

Location: Swift Creek
Date: 3/6/19
Sampler: MIKE KING

100 m: Latitude 30.52947
Longitude 86.467104
0 m: Latitude 30.52858
Longitude 86.46729

Substrates: Code key, draw proportionate habitat abundance. %		
	Snags	<u>45.5</u> / <u>6</u> = <u>7.6</u>
	Roots/undercut banks	<u>10</u> / <u>6</u> = <u>1.7</u>
	Leaf Packs (or mats)	
	Aquatic Macrophytes	<u>50.2</u>
	ROCK	<u>0.1</u>
	Pools	
total # observed = _____		
# range expected = _____		

Average width 6 m
Average depth 0.6 m

Velocity measured at 20 meter mark.

WQ & chemistry taken at 0 meter mark.

Habitat Smothering:
Note areas (on map) where sand or silt is smothering substrates, limiting habitability.

Bank Stability:
Note areas (on map) with unstable, eroding banks.

Riparian Buffer Width:
Note areas (on map) where natural vegetation is altered or eliminated.

Plants observed / other notes:

SB10 ZD 79248
Store 7: G3NW0149

S 0.5
R 1
LP 0.5
ROCK 0.25
AM 5

DEP Form FD 9000-5 Stream/River Habitat Assessment Field Sheet

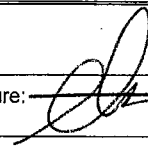
SAMPLING AGENCY: NW RCC		STORET STATION NUMBER: G3NW0149	DATE (MM/DD/YY): 3/6/19	RECEIVING BODY OF WATER: Rocky Bayou
REMARKS: SB102D	COUNTY: OKALOOSA	LOCATION: Swift Creek upstream 285	FIELD ID/NAME: G3NW0149	

Habitat Parameter	Optimal	Suboptimal	Marginal	Poor
Primary Habitat Components	Four or more major productive habitats present (snags, tree roots, aquatic vegetation, leaf packs (partially decayed), rock)	Three major productive habitats present. Adequate habitat. Some substrates may be new fall (fresh leaves or snags)	Two major productive habitats present. Less than desirable habitat, frequently disturbed or removed	One or less major productive habitat. Lack of habitat is obvious, substrates unstable or smothered
Substrate Diversity <u>12</u>	20 19 18 17 16	15 14 13 <u>12</u> 11 <i>sand smothered most snags</i>	10 9 8 7 6	5 4 3 2 1
Substrate Availability <u>17</u>	Greater than 30% major productive habitat present at site <i>most smothered</i> 20 19 18 <u>17</u> 16	16% to 30% major productive habitat, by aerial extent 15 14 13 12 11	6% to 15% major productive habitat 10 9 8 7 6	Less than 5% major productive habitat 5 4 3 2 1
Water Velocity <u>20</u>	Max. observed at typical transect: > 0.25 m/sec. But < 1 m/sec 0.33 0.31 0.29 0.27 >0.25 <u>20</u> 19 18 17 16	Max. observed at typical transect: >0.1 to 0.25 m/sec 0.25 0.21 0.17 0.13 >0.1 15 14 13 12 11	Max. observed at typical transect: 0.05 to 0.1 m/sec 0.1 0.09 0.07 0.06 0.05 10 9 8 7 6	Max. observed at typical transect: <0.05 m/sec; or spate occurring: > 1 m/sec <0.05 0.04 0.03 0.01 <0.01 5 4 3 2 1
Habitat Smothering <u>11</u> ----- Primary Score <u>60</u>	Adequate number of stable pools (1-2 per 12 times width) and <25% of habitats affected by sand, silt, or algae. 20 19 18 17 16	Adequate number of stable pools (1-2 per 12 times width) and >25% of habitats affected by sand, silt, or algae. 15 14 13 12 <u>11</u>	Does not have required number of stable pools (1-2 per 12 x width) and/or has shallow pools (<2 x prevailing depth). 10 9 8 7 6	Stable pools are absent. Most habitats affected by sand, silt, or algae accumulation. 5 4 3 2 1
Secondary Habitat Components	Expected sinuosity given the stream width. No evidence of dredging or artificial straightening. No spoil banks.	Good sinuosity within old channelized area. Evidence of dredging or straightening in the past (>25 yrs) but mostly recovered.	Straightened with trapezoidal cross section, but has a small degree of sinuosity developed within channelized area.	Straightened or engineered by dredging, has trapezoidal or box cut cross section, lacks required pools. May have spoil banks.
Artificial Channelization <u>19</u>	20 <u>19</u> 18 17 16	15 14 13 12 11	10 9 8 7 6	5 4 3 2 1
Bank Stability	Bankfull > 60% of bank height. Slope of bank ≤ 60° from bankfull to top of bank. Bankfull is within or above the woody root zone with few raw, eroded areas.	Only meets 2 of the 3 requirements for optimal bank stability.	Only meets 1 of the 3 requirements for optimal bank stability.	Bankfull < 60% of bank height. Slope of bank > 60°. Bankfull is below the woody root zone with raw, eroded areas.
Right Bank <u>10</u> Left Bank <u>9</u>	10 <u>9</u>	8 7 6	5 4	3 2 1
Riparian Buffer Zone Width	Width of vegetation greater than 18 m	Width of vegetation >12 to 18m	Width of vegetation 6 to 12 m. human activities close to system	Less than 6 m of buffer zone due to intensive human activities
Right Bank <u>10</u> Left Bank <u>9</u>	<u>10</u> <u>9</u>	8 7 6	5 4	3 2 1
Riparian Zone Vegetation Quality	Over 80% of riparian surfaces consist of normal, expected plant community for given sunlight & habitat conditions (e.g., native plants; tree, shrub, and forbs represented, if appropriate). Minimal disturbance.	>50% to 80% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Some disruption in community observed.	25% to 50% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions). Disruption obvious.	Less than 25% of riparian zone is undisturbed (normal, expected plant community for given sunlight & habitat conditions).
Right Bank <u>9</u> Left Bank <u>9</u> ----- Secondary Score <u>75</u>	10 <u>9</u>	8 7 6	5 4	3 2 1

135

TOTAL SCORE

HAID 15674

Date: 3/6/19	Analyst: MIKE KING	Signature: 
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DEP FORM FD 9000-25 Rapid Periphyton Survey Field Sheet

Site: Swift Creek upstream 285 County: OKLAHOMA Date: 03/06/19 Investigators: MIKE KING / NEHMAN MULLEN

Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	Transect (m)	Point 1=right 9=left	Algal Thickness Rank (N-6, X)	Estimated	Canopy Cover	
0	1	N	N		60	1	N	N		
	2					2				
	3					3				
	4					4				
	5					5				20
	6					6				
	7					7				
	8					8				
	9					9				
10	1	N			70	1	N			
	2					2				
	3					3				
	4					4				
	5					5				16
	6					6				
	7					7				
	8					8				
	9					9				
20	1	N			80	1	N			
	2					2				
	3					3				
	4					4				
	5					5				16
	6					6				
	7					7				
	8					8				
	9					9				
30	1	N			90	1	N			
	2					2				
	3					3				
	4					4				
	5					5				24
	6					6				
	7					7				
	8					8				
	9					9				
40	1	N			100	1	N			
	2					2				
	3					3				
	4					4				
	5					5				20
	6					6				
	7					7				
	8					8				
	9					9				
50	1	N			Record "N" and check "Estimated" for points deeper than the Secchi depth; algae are presumed absent. Check "Estimated" if thickness estimated for deep points which can be seen but not reached. Record "X" for points shallower than Secchi depth for which substrate cannot be seen or reached with the hand. No estimated rank. Record canopy cover as the number of small densiometer quadrants (out of 96) that HAVE canopy cover. Measure facing upstream at point 4, 5, or 6. Collect algal mat sample following DEP SOP FS 7240 if the percentage of total sampled points with a thickness rank of 4, 5, or 6 is >20%.					
	2									
	3									
	4									
	5									
	6									
	7									
	8									
	9									

STORET Station Number:
G3NW0149

Secchi depth > 1.2
Estimated? yes

points ranked 4-6 4
total points assessed 99
% points ranked 4-6 4

Check accompanying data collected at same site/date.
Algal mat sample ☐
Linear Veg Survey ☒
Habitat Assessment ☒
SCI/Biorecon ☐
Water sample ☒
RQ- 2019-02-18-20

Algal Thickness Rank	
N	rough, no algae, slimy, algae up to 1mm
3	>1mm - 6mm
4	>6mm - 20mm
5	>20mm - 10 cm
6	>10 cm

SB10 ID: 79248
RPS ID: 9257

Waterbody: <u>Swift Creek</u>	Date: <u>3/6/14</u>	County: <u>OKALOOSA</u>	Storet Number: <u>G3NW0149</u>
Analyst: <u>MIKE KING</u>		Signature: <u>[Signature]</u>	

Instructions: Note taxa growing in the water with a checkmark if present, "D" if dominant, and "C" if codominant (dominance only if 1m² of taxa present). Note in the boxes below if no dominant are selected, and note total macrophyte abundance rank for each section. Only the most common taxa are listed, so use blank spaces for additional taxa names.

[illegible]

LIMS ID: 206957